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Shellfish Research at UNCW

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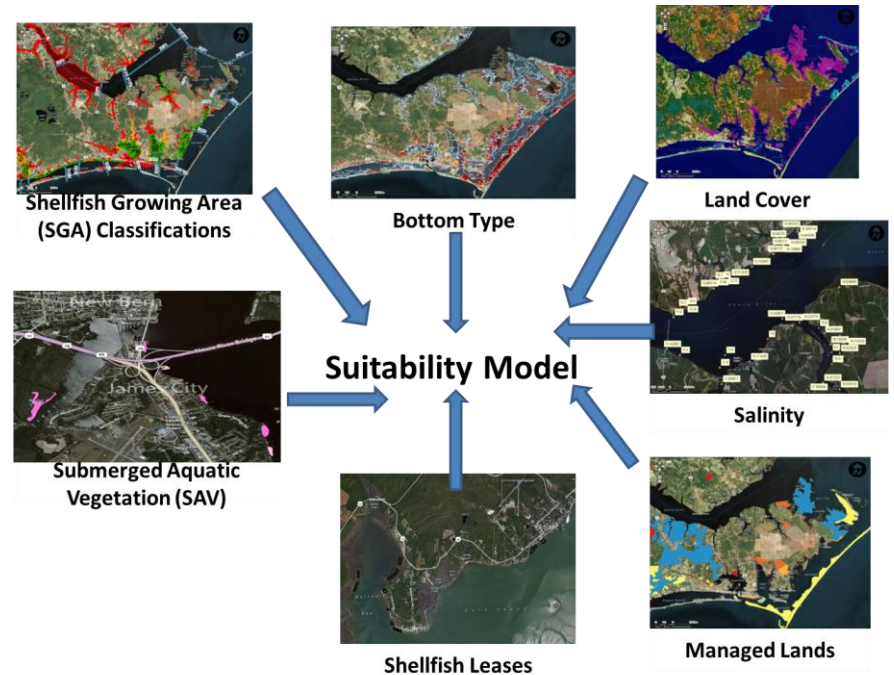
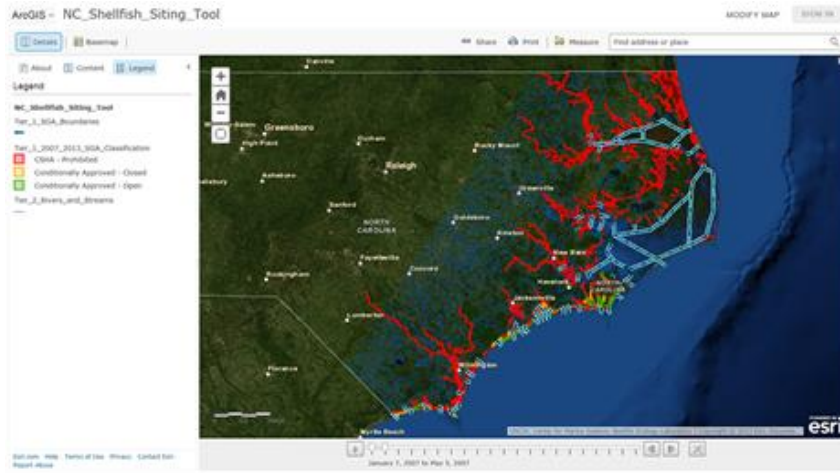
- Understanding our wild oyster populations (Alphin, Finelli, Kamel, Leonard, Loh, Mallin, Posey, Varney, Volety, Wilbur)
 - Oyster distribution, growth, survival, and recruitment
 - Role of disease
 - Interactions with other plants and animals, including predation
 - Key factors that determine the resilience of our wild oyster populations



- Understanding the ecosystem impacts of oysters and oyster restoration (Alphin, Eulie, Jarvis, Leonard, Mallin, Posey, Wilbur)
 - Critical ecosystems services important to our local economies
 - Fisheries
 - Habitat for commercially important species such as blue crabs
 - Improve water quality
 - Shoreline protection



- Shellfish Mariculture (Alphin, Darrow, Jarvis, Posey, Varney, Volety, Wilbur)
 - Oyster lease siting tool
 - GIS based tool that compiles numerous existing data sets to allow potential growers to virtually examine areas that may be appropriate for new mariculture operations
<http://uncw.edu/benthic/sitingtool/>



- Shellfish Mariculture (Alphin, Darrow, Jarvis, Posey, Volety, Wilbur)
 - Impacts in the field
 - NERR Science Collaborative Project
 - Examining impacts of commercial oyster farming on water quality and on adjacent fauna, including wild shellfish populations resources
 - Evaluating maximum farm capacity in an area
 - Seagrass communities



- Shellfish Research Hatchery

- Mission statement

- *To conduct and facilitate research that will both inform and contribute to North Carolina's efforts to restore declining populations of ecologically and commercially important shellfish and to build a sustainable shellfish aquaculture industry.*

- In operation since 9Feb2011

- Our Program
 - Selective breeding of oysters for aquaculture



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Bay scallops
Argopecten irradians



Sunray Venus clams
Macrocallista nimbosa

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 - Cage types and husbandry strategies

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 - Cage types and husbandry strategies
 - Education and outreach



Questions?

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